



## Research Article

**MENSTRUAL HYGIENE IN SCHOOL GOING GIRLS: A SURVEY STUDY****Varsha Makapur, Pooja Rathod, Marjeena Nadaf, Parveen Nadaf, Mamata Y.Khatawkar, Suvarna P. Nidagundi**

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**KEYWORDS:** Menstruation, Hygiene, Adolescent girls, Sanitary pads, Diet, Yoga and Meditation.**ABSTRACT**

**Background:** Menstruation is a normal physiological process to the females but even in this modern era people set back to speak out freely about menstruation and menstrual related problems. **Objectives:** To study about the menstrual hygiene practices and dietetic pattern among the adolescent girls. **Materials and methods:** A community based cross sectional study was conducted in January and February in Gadag district of Karnataka among 150 adolescent school going girls in the age group of 14-16 years. Data was collected by the predesigned and pretested questionnaires. **Observation:** During the study it was observed that till today few adolescent girls did not feel it comfortable to tell freely about their menstrual practices and problems. It was observed that the dietetic pattern of the teens left a major impact on their menstrual problems. **Results:** 115 out of 150 girls use sanitary napkins as their hygienic practices but the rest still used cloth. It is necessary to educate them about the dietetic patterns to be followed. **Conclusion:** Hygienic practices during menstruation were satisfactory. Girls should be educated about the proper hygienic practices, dietetic pattern, yoga and meditation as well as bring them out of traditional misconceptions and restrictions regarding menstruation.

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Email: [mamataky84@gmail.com](mailto:mamataky84@gmail.com)**INTRODUCTION**

WHO has defined adolescent as the period between 10-19 years of life.<sup>[1]</sup> Puberty in girls is the period which links childhood to adulthood. It is the period of gradual development of secondary sexual characters. There are profound biological, morphological, and psychological changes.

Five important physical changes are evident during puberty these are breast, pubic and axillary hair growth, growth in height and menstruation.<sup>[2]</sup>

In India it is generally considered as unclean process. Isolation and restrictions are been imposed upon them either by family or by society.

Many adolescent girls have incomplete and inaccurate knowledge regarding menstrual cycle, hygiene practice, diet pattern and benefits of yoga and meditation during the menstrual cycle.

Awareness regarding do's and don'ts during menstrual cycle have been explained even in the

ancient period by our Acharyas like Sushruta, Charaka (Rajaswala Charya).<sup>[3-4]</sup>

Sympathetic and careful handling of young girls experiencing their first menstruation is important. This should be done by mother explaining the physiological and other associated changes during period. The girls should carry out their daily activities and bath should not be suspended during initial few periods, the girl may use sanitary pads comfortably but with experience may be changed to other methods of sanitation.<sup>[5]</sup> Diet plays a very important role during Menstrual cycle. Girls need to pay special attention to foods rich in protein, iron and other nutrients necessary for synthesis and regeneration of Red blood cells. The girl's diet should include all foods like – Dals, leafy vegetables, dried fruits, eggs, liver and red meats may also be used if acceptable.<sup>[6]</sup> Regular practice of yoga and meditation helps in dealing the physical and mental disturbances faced prior to

menstruation and during menstruation. *Asanas* like *Baddhakonasana*, *Upavishta konasana*, *Virasana*, *Paschimotanasana*.<sup>[7]</sup>

Therefore knowledge about the menstruation right from childhood may lead to the safe practice and mitigates the sufferings of millions of women.

With this background the present study is undertaken to assess the knowledge, source of information regarding menstrual cycle among adolescent girls and to indentify status of hygiene practice during menstrual cycle.

### Glimpse

Menstruation is the visible manifestation of physiologic uterine bleeding due to shedding of endometrium following invisible interplay of hormones mainly through hypothalamo-pituitary-ovarian axis. Once the menstruation starts it continues cyclically at intervals of 21-35 days with the mean of 28days. The duration of menstruation is about 4-5 days and the amount of blood loss is estimated to be 20-80ml with an average of 35ml. Nearly 70% of total menstrual blood loss occurs in the first 2 days. The menstrual discharge consists mainly of dark altered blood, mucus, vaginal epithelial cells, fragments of endometrium, prostaglandins, enzymes and bacteria.<sup>[8]</sup>

### According to Ayurveda

Entire period of one month is divided into 3 phases

### Study population

150 number of girls who are fit for inclusive criteria were included under the study.

Inclusive criteria	Exclusive criteria
Age 14-16 year	Age less than 14 years
Not suffering from any systemic disease.	-

### Ethical clearance

Clearance was obtained from Institution and consent was taken from schools.

### Data collection

- A pre-designed questionnaire was used.
- Care was taken to ensure the privacy.
- The pre-designed questionnaires include topics regarding menstruation, source of information, hygiene practices, diet, physical and mental disabilities during pre-menstrual and menstrual cycle.

Following data collection, queries from students related to menstrual cycle and reproductive health was carried out.

**Data Analysis:** Data obtained were entered into Microsoft Excel and analysed.

**Results:** Results are drawn by the pre-questioned survey and drawn in table form.

Total Number of students =150 samples.

**Table 1: Age at which menarche attained**

<12 years	21
12-14 years	120
>14 years	09

1) Rajasrava for 3-5days

2) Rutukala for 12-16 days

3) Ritu vyathithakala for 9-13 days.<sup>[9]</sup>

### Regularity of menstrual cycle

Criteria used: Duration between each cycle must be 21-35 days. Each month one cycle.

### Quantity of blood flow

Criteria Used: Based on the usage of sanitary pads (each stayfree pad absorbs 20ml).

Normal: 2-3 pads per day.

Excess: more than 4 pads per day.

Scanty: 1 pad per day.

### OBJECTIVES

- To study and survey about menstrual hygiene in School going girls.
- To assess the knowledge and the practice of menstrual hygiene in adolescent girls.
- To provide proper knowledge regarding menstrual cycle, hygiene practices, diet pattern and benefits of yoga and meditation.

### METHODOLOGY

Survey done among 150 number of adolescent girls.

Data was collected after taking the consent from the students by predesigned and pretested questionnaires. For the study, High schools were selected from different locations.

**Table 2: Awareness about menstruation before menarche**

Yes	93
No	57

**Table 3: Regularity of menstrual cycle**

Yes	127
No	23

**Table 4: Quantity of Blood flow**

Quantity of Blood flow	Number of students
Normal	100
Excess	10
Scanty	23
Irregular	17 =150

**Table 5: Type of absorbent used**

Sanitary Pad	115
Cloth	10
Both	25

**Table 6: Length of menstrual cycle**

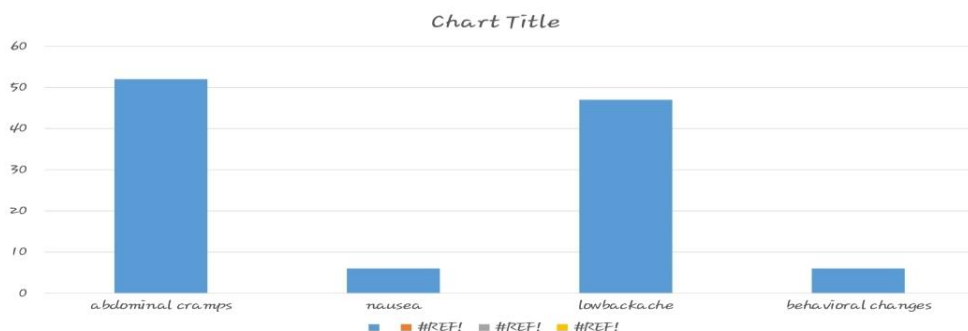
16-27 days	92
28-35 days	51
>35 days	07

**Table 7: Discomfort before menstrual cycle**

Yes	92
Abdominal cramps	52
Nausea	06
Low backache	47
Behavioural changes	06

**Table 8: Discomforts during menstrual cycle**

Backache/Fatigue	69
Headache	16
Vomiting	07
Loss of appetite	09
Constipation	03
Emotional discomfort	38
Depression	07
Irritation	19
Lack of concentration	16
Stress	13

**Discomfort before menstruation**


**Table 9: Cope up methods to avoid disturbances during menstrual cycle**

Rest	75
Mild walk	17
Allopathic medicine	20
Home remedies	16
Hiding problems	22 = 150

**Table 10: Medicine used to postpone cycle**

Yes	10
No	140

**Table 11: Sleep pattern**

5-6 hours	12
7-8 hours	85
More than 8 hours	39
8 hours sleep + day sleep	14 = 150

**Table 12: Type of Diet**

Spicy content	05
Sweet item	03
Oily food	20
Mixed food	122 = 150

## DISCUSSION

- In the study, among the 150 high school girls 62% of them were aware about the menstruation before menarche.
- 80% of the girls have attained Menarche at the age between 12 and 14 years and among them 84% girls were having their cycle regularly.
- About 61% of them have the duration of 16-27 days between each cycle. Remaining have the duration of 28-35 days and more than 35 days.
- 81% of girls consumed mix type of diet which includes spicy content, sweet items and oily food. On discussion, many of them said they were habituated with the bakery items.
- The flow is found to be normal in more than half of total number of girls and the rest were complaining of scanty, irregular and excess flow. These complaints might be due to their food habits and life styles.
- Above 61% of girls experience discomfort before menstrual cycle this may be due to their dietary habits and lifestyle modifications. Not only before menstrual cycle but the girls are experiencing physical and emotional discomforts even during their menstrual cycle like abdominal cramps, nausea, vomiting, depression, irritability, lack of concentration etc.
- 115 out of 150 girls use sanitary napkins as their hygienic practices and the rest of them use clothes. Proper education and awareness is necessary about the hygienic practice.
- About 50% of girls take rest during their cycle and remaining adopt other methods like- a mild walk, taking Allopathic medicines, home remedies etc.
- The sleeping hours found to be adequate and proper in 50% of girls i.e. for 7-8 hours. 19% of them sleep for more than 8 hours and the remaining 14% sleep for 5-6 hours.
- On interaction it was observed that maximum numbers of girls were already aware about the process of menstrual cycle.
- To educate the students about the menstruation some of the sessions like explaining about the hygienic practices, diet pattern, Yoga and meditation were carried out.

**Hygienic practices:** Importance measures and the disposable methods were discussed.

**Diet pattern:** Food to be consumed and avoided during the menstrual cycle were explained.

**Yoga and meditation:** Scope and benefits of Yoga and meditation.

Different yogic postures were demonstrated.

## CONCLUSION

- This study was conducted to ascertain knowledge and practices among adolescent girls. The study revealed that menstrual hygiene was satisfactory among adolescents.
- Educating young girls about the routine practices of taking a bath with warm water in the early days of menstrual period, regular hand washing

and regular cleaning of external genitalia leads to the development of positive mental and social behavior and also be effective in reducing hygiene problems in community.

- Education regarding reproductive health and hygiene should be given by teachers and also must be included in the school curriculum. Incorrect restrictions, myths and benefits associated with menstruation can be removed by teachers and parents.
- Incorrect restrictions, myths like-
  - Not entering the “puja” room, kitchen.
  - Menstruating girls and women’s were restricted from offering prayers and touching Holy Books.
  - It is further believed that the menstruating women are unhygienic and hence food prepared or handle might get contaminated.
  - In some cultures, women bury their cloths used during menstruation to prevent they being used by evil spirits.
  - Some restrictions are also beneficial like avoiding curd and other sour food items during menstrual cycle like- these may increase the quantity of bleed.
- Creating awareness must be continued among the adolescent girls nowadays.

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## REFERENCES

1. World Health Organization. Programming for adolescent health and development. WHO technical report series No. 886,1992:2
2. DC Dutta. Text book of Gynecology. 7<sup>th</sup> edition. Delhi; Jaypee Brother Medical Publisher (P)Ltd. 2016.p.39
3. Dr. Kevala Krishna Thakral. Sushrutasamhita Vol.1 (Sutrasthana). Varanasi; Chaukambha Orientalia. 2016.p.143
4. Acharya Vidyadhar Shukla and Prof. Ravi Dutt Tripathi. Charakasamhita Vol.2 (Shareerasthana). Delhi; Chaukambha Sanskrit Pratisthan. 2017.p.773-774
5. DC Dutta. Text book of Gynecology. 7<sup>th</sup> edition. Delhi; Jaypee Brother Medical Publisher (P)Ltd. 2016.p.76
6. S.R Mudambi and M.V Rajagopal. Fundamentals of Food, Nutrition and Diet therapy.5<sup>th</sup> edition. New Delhi; New Age International (p)Ltd. publisher.2007.p.200
7. B.K.S Iyengar. The illustrated light on Yoga.10<sup>th</sup> edition. New Delhi; Herper Collis Publisher. 2005.p.62,65-66,78-81
8. DC Dutta. Text book of Gynecology. 7<sup>th</sup> edition. Delhi; Jaypee Brother Medical Publisher (P)Ltd. 2016.p.66
9. Acharya Vidyadhar Shukla and Prof. Ravi Dutt Tripathi. Charakasamhita Vol.2 (Shareerasthana). Delhi; Chaukambha Sanskrit Pratisthan. 2017.p.780-781

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